

REMARKS

Upon entry of the Amendment, Claims 1-19 are pending in the application. The Examiner has required restriction of the claims under 35 U.S.C. § 121 between Group I, namely Claims 1-11, Group II, namely Claims 12 and 13, and Group III, namely Claims 14-17. Applicants hereby confirm the election with traverse to prosecute the bag claims of Group I (Claims 1-11) and expressly reserves the right to file divisional applications or take such other appropriate measures deemed necessary to protect the inventions in the remaining claims.

Claims 12-17 are withdrawn from consideration by the Examiner pursuant to 37 C.F.R. § 1.142(b), as being drawn to a non-elected invention.

Claims 18 and 19 are added by amendment. Basis for these amendments may be found in the Specification, *e.g.*, Page 12. No new matter has been added.

Reexamination and reconsideration of the rejections are requested.

The Requirement For Restriction

The Examiner states:

The inventions are distinct, each from the other because of the following reasons:

Inventions II and I are related as mutually exclusive species in an intermediate-final product relationship...

Inventions III and I are related as mutually exclusive species in an intermediate-final product relationship...

Because these inventions are distinct for the reasons given above and have acquired a separate status in the art as shown by their different classification, restriction for examination purposes as indicated is proper.

Because these inventions are distinct for the reasons given above and the search required for Group I is not required for Group II, restriction for examination purposes as indicated is proper.

Because these inventions are distinct for the reasons given above and the search required for Group I is not required for Group III, restriction for examination purposes as indicated is proper.

Because these inventions are distinct for the reasons given above and have acquired a separate status in the art because of their recognized divergent subject matter, restriction for examination purposes as indicated is proper.

While the Examiner has stated that the search required for Group I is not required for Group II or Group III, the converse has not been stated. It is particularly noted that the Examiner in making the instant § 103(a) rejection, combines patents claiming film with a patent claiming a patch bag.

It is respectfully submitted that the searches for the Groups are so interrelated these Groups ought to be examined together as a matter of economic efficiency. Art relevant to the examination of the film claims is almost certainly relevant to the examination of the bag claims and therefore the resources of Applicants and the Patent Office are believed to be most efficiently applied in examination and prosecution of all the claims together.

With respect to this, the Examiner is respectfully reminded of MPEP § 803 which states in part:

If the search and examination of an entire application can be made without serious burden, the Examiner must examine it on the merits, even though it includes claims to independent or distinct inventions.

In the instant application, it is submitted that all of the Groups, but particularly the film and bag claims, Groups I and III, ought to be examined together because the searches and examination may be without undue burden.

In view of the above remarks, it is requested the requirement for restriction in the above application be withdrawn and all of the claims examined together.

The § 103 Rejection

Claims 1-10 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Childress, et al., U.S. Patent No. 6,287,613 ("the '613 patent") in view of Georgelos, et al., U.S. Patent No. 5,397,640 ("the '640 patent") and Georgelos, U.S. Patent No. 5,593,747 ("the '747 patent").

The Examiner states her grounds for the rejection thusly:

Childress teaches heat shrinkable bag and patch combinations (abstract) in which both the bag and the patch are made of blends of thermoplastic polymers. The first heat shrinkable film – which is used to make the patch (col. 2, lines 56-57) – contains an ionomer (col. 3, line 35), and ethylene/alpha-olefin copolymer (col. 3, line 35-6). The second heat shrinkable film may contain the same or different ethylene/alpha-olefin copolymers (col. 3, lines 11-15). The ethylene/alpha-olefin copolymers used can also contain ethylene/vinyl acetate copolymer (col. 3, lines 39-40). The copolymers can contain butene-1, hexane-1 (sic), and octane-1 (sic), and preferably contain blends of hexane (sic) and butene (col. 8, lines 40-45).

The patch component is biaxially stretched and shrinkable (col. 24, lines 45+).

Childress does not teach the use of two ethylene/alpha-olefin copolymers with EVA or low melting point ethylene/butene/hexene terpolymers in heat shrinkable films.

Georgelos et al teaches the use of EVA with two ethylene/alpha-olefin copolymers in films (col. 3, lines 55-60) and the use of "Exxon 3033"™ in such films (col. 6, lines 16-40).

Georgelos teaches that "Exxon 3033"™ is a terpolymer of ethylene, butene, and hexane.

All three patents are analogous because they deal with heat shrinkable packaging films.

It would have been obvious to one having ordinary skill in the art at the time that the invention was made to employ the terpolymer of Georgelos and Georgelos et al as a component, along with EVA in the shrinkable films from which the bag or patch components of the Childress combinations are made.

The selection of suitable ethylene/olefin copolymers to give the recited melting points and shrinkage properties would have been a matter of engineering choice. (Paper No. 4, Paragraph 8).

Claim 11 is rejected under 35 U.S.C. § 103(a) as being unpatentable over Childress ('613), Georgelos, et al. ('640) and Georgelos ('747), as applied to Claims 1-10 above and further in view of JP 58205765A (Abstract).

The Examiner states her grounds for the rejection of Claim 11 thusly:

Childress, Georgelos et al and Georgelos are discussed above.

They do not teach the use of zinc ionomers based on ethylene/methacrylic acid copolymers.

The Japanese abstract teaches that zinc-crosslinked ionomers (both paragraphs) based on ethylene/methacrylic acid copolymers (second paragraph) are useful in heat sealable packaging films having good breakage resistance (last line of second paragraph).

All four references are analogous because they deal with packaging films.

It would have been obvious to one having ordinary skill in the art at the time that the invention was made to employ the zinc-crosslinked ionomers of the Japanese abstract in the patch component of the patch and bag combinations suggested by the combination of Childress with Georgelos et al and Georgelos in order to make the patch more breakage resistant. (Paper No. 4, Paragraph 9).

The Examiner admits that Childress fails to teach "the use of two ethylene/alpha-olefin copolymers with EVA or low melting point ethylene/butene/hexene terpolymers in heat shrinkable films." In order to supplement the admitted deficiencies of the Childress, the Examiner cites the '640 patent stating that "Georgelos et al teaches the use of EVA with two ethylene/alpha-olefin copolymers in films (Col. 3, lines 55-60) and the use of "Exxon 3033"™ in such films (Col. 6, lines 16-40)." The Examiner concludes that it "would have been obvious to one having ordinary skill in the art at the time that the invention was made to employ the

terpolymer of Georgelos and Georgelos et al as a component, along with EVA in the shrinkable film from which the bag or patch components of the Childress combinations are made."

The Examiner's conclusions are in error for the following reasons.

First, the Childress '613 reference fails to teach the combination of "5 to 20 weight percent of (i) an ionomer polymer; 5 to 95 weight percent of (ii) a copolymer of ethylene and at least one C₆ to C₈ α -olefin, wherein said copolymer (ii) has a melting point of from 55 to 95°C, and a $\overline{M}_w/\overline{M}_n$ of from 1.5 to 3.5A" as required by all of the present claims. Furthermore, Claims 18 and 19 specify use of a monolayer patch film whereas the Examiner's reference to Col. 3, lines 35-6 of Childress '613 with reference to ionomer is to a multilayer patch where the ionomer, if selected, would be buried in the multilayer patch.

Also, nothing in the cited references discloses the claimed total energy absorption of at least 0.70 Joule. Also, all of the present claims cite specific ranges of materials. The Examiner has not shown that the specified ranges of materials in the claimed combinations are disclosed by any of the references. The '640 reference claims films having a specific three component blend. It is notable that the plastomer component of Claim 1 of the '613 patent is present in a range "between about 33 and about 45 wt. % of said three component blend." Whereas, the present invention claims, in part, "45 to 85 wt. % of a first polymer having a melting point of from 55 to 98°C comprising at least one copolymer of ethylene and at least one comonomer selected from the group of hexene-1 and octene-1." Thus, it is seen that only the endpoints of these respective ranges overlap. It is not understood how this overlap of end points renders "obvious" the claimed selection which has a substantially different range which requires a further selection of a specific copolymer, from a limited set, in combination with specified ranges of at least two other specified polymers in a bag structure having a patch film which is yet another blend having specific ranges which require selection of "5 to 20 weight percent of (i) an ionomer polymer" with 5 to 95% of another specified copolymer having a melting point of from 55 to 95°C and a narrow molecular weight.

Furthermore, there is no teaching of the selection of the combination of polymers (ii), (iii), (iv) and (v) to have a combined weight percentage of at least 80 weight percent based upon the total weight of polymers (i), (ii), (iii), (iv) and (v). Also, all of the cited references are void of

any reference to the required total energy absorption of at least 1.2 Joule through a patch covered bag area.

Referring to the Examiner's § 103(a) rejection of Claim 11, the Examiner has supplemented the above noted three references with an abstract of a Japanese publication which discloses a laminate of a blended resin layer of 80 to 95 wt. % of an ionomer which may be a zinc metal salt of ethylene methacrylic acid with 5 to 20 wet. % amorphous or low crystallinity ethylene alpha-olefin copolymer coextruded with a polyamide.

This reference is evidence of the nonobviousness of the present invention. The '765 abstract clearly teaches away from the present invention's requirement of "5 to 20 weight percent of (i) an ionomer polymer" as defined and required by all of the instant claims. One of ordinary skill in the art presented with the '765 abstract would be motivated to not only make the overwhelming majority of the film blend the ionomer component, but would also require use of a polyamide layer.

With respect to all of the present claims, The Examiner's attention is also directed to the present Examples where the superiority of the claimed invention over two prior art commercial patch bags is shown. Especially noteworthy are the severe Bed of Nails Test and the Ram Puncture Test data in Table 1. There it is seen that the commercial prior art patch bags failure rate was 94 to 100% for the Bed of Nails Test versus 8 to 72% for embodiments of the invention. An exceptional and unexpected improvement is demonstrated.

In summary, it is respectfully submitted that the Examiner has failed to make out a *prima facie* case of obviousness, but insofar as such case may have been made, it is rebutted by the above arguments and the references themselves. It is well established that the Patent Office has the initial duty of supplying the factual basis for its rejection. *See, In re Warner & Warner*, 154 U.S.P.Q. 173 (CCPA, 1967).

Reexamination and reconsideration of the application and claims are requested. It is believed that the claims are in condition for allowance, which is earnestly requested.

It is not believed that extensions of time or fees for net addition of claims are required, beyond those that may otherwise be provided for in documents accompanying this paper. However, in the event that additional extensions of time are necessary to allow consideration of this paper, such extensions are hereby petitioned under 37 C.F.R. §1.136(a), and any fee required therefore (including fees for net addition of claims) is hereby authorized to be charged to Deposit Account No. 502023.

Respectfully submitted,



Cedric M. Richeson
Registration No. 29,339

BEMIS COMPANY, INC.
Patent And Trademark Department
2200 Badger Avenue
Oshkosh, WI 54904
Telephone: 920-303-7812
Facsimile: 920-303-7810
Customer No. 30482